INDEX VOLUMES XVII and XVIII

TELEPHONE ENGINEER

JANUARY 1, 1917, TO DECEMBER 31, 1917

Page numbers for Volume XVIII, July to December, appear in *bold face* type. *Indicates that the article is illustrated.

A

Abandon One Line, City Would..... 334
Abolish Moving Day, Move to..... 188
Accident Prevention in the Telephone Field. By J. F. Naylon.....211–213
Accounting, The Necessity for Better. By H. B. Warren..... 214
Activities of the Bell System, War...82–84
Additional Equipment for Waco, Texas. 164
Advantages of Motor Trucks..... 70
Advertising Booklet, A Successful*..... 164
Advised to Stick, Employes..... 144
Advertising Slides, New Kellogg*..... 95
Affecting Rates, Obsolescence as. By C. E. Grounsky.....223–224
Affiliations, Operators Deny Union.... 172
Agriculture, Dept. of, Installs Stromberg Inter-Comm-Phone System..... 248
Aircraft, Telephone Vibrations Direct*.....265–266
Allows Sale, Illinois Court..... 251
American Telephone Well Financed... 194
American Association of Engineers Forming Student Club..... 17
American Pep Improves Service..... 199
American Telegraph Invention, Endorse 284
American Telephones, China Wants... 38
American Telephone in France..... 206
Another S-C Bulletin*..... 45
Anniversay, Automatics Silver*..... 106
Annual Bell Report, The.....179–184
Antigo Exchange Changes Hands Rapidly 41
Anti-Night Work Bill in Pennsylvania 125
Appraisals, Effect of Recent Decisions on. By Philander Betts.....199–200
Apparatus Catalog, New Kellogg*..... 48
Appeals Order, Central Union..... 4
Argentina, Telephone in.....12
Argentina, Telephony in..... 36
Armored Cruiser, Galesburg's..... 244
Arrester, An Improved Switchboard*.. 225
Art of Speech, The..... 202
Articulation in Transmission, Value of.* By Ray H. Manson.....155–156
Artillery, 149th U. S. Field, Kellogg Equipped* 247
Ask New Switchboard, Subscribers.... 195
Ask Guards for Big Toll Junction..... 278
Asks for Colored Operators..... 84
Association for Politics, Ohio..... 190
Association of Commissions, National.. 245
Association, Our, Its Powers and Responsibilities.* By F. B. MacKinnon 18–22
Association President, G. W. Robinson Now* 299–300
Association Joins National Chamber, Independent 131
Atlantic City-Philadelphia Cable..... 214
Attica Company Buys S-C Equipment. 46
Attitude of Labor in Emergency, The (editorial) 204
Audibility Current of a Telephone Receiver.* By E. W. Washburn..... 313
Austin's Merger Situation..... 66
Automatic Exchanges, Scientific Management in.* By W. Lee Campbell.27–29
Automatic's Silver Anniversary*..... 106
Automatic Telephony, Recent Developments in.* By Arthur Bessey Smith 149–152
Automatic Cut-Over, Indianapolis..... 225
Automatics for Railway..... 70
Automatic for Elyria..... 85
Automatic for Mutual at Erie, Pa..... 93
Automatic Growing, Newark..... 130
Automatics for Ohio Farmers..... 145
A. A. E. Banquets Engineers..... 290
A. A. E. Organizes Three New Chapters 197
A. I. E. E. Committee Reports..... 86
A. T. & T.'s Central Union Holding Void 61–65
A. T. & T. Constitution Figures..... 261
A. T. & T. Excess Profits Tax..... 276
A. T. & T. Profits Tax..... 261
A. T. & T. Rings the Christmas Bell... 26
A. T. & T., Some Observations on the. By Terry W. Allen.....187–188
A. T. & T. at Seven Per Cent..... 162
A. T. & T. Stockholders 262
A. T. & T. Takes $5,000,000 Bonds..... 206

B

Bar Committee for Private Service.... 302
Base Hospital, New Radio for..... 224
Batteries, Compound for Rebuilding Dry 60
Batteries for Rural Telephone, Storage.* By H. E. Brockwell..... 128
Batteries, Operating Railway Selectors Without.* By J. G. Wray.....196–198
Batteries, Saving Telephone Dry*..... 197
Batteries in Exchange, Charging Storage.* By L. A. Brackett..... 7–9
Battery Consumption, Conservation of* 330
Battery Cell Tester, Convenient..... 96
Battery Cost, Reducing*..... 250
B. C. Telephone Company Statistics... 159
Beaumont, Texas, Merger Probable... 247
Bell, Kansas Headquarters for..... 154
Bell Combination, New..... 70
Bell Rates Ordered Down, Pennsylvania 268
Bell, Florida, Has Merging Franchise. 276
Bell Report, The Annual.....179–184
Bell, Medal for A. G..... 220
Bell, Central Union Divorced from...55–57
Bell Semi-Annual Statement..... 76
Bell Monument Unveiled..... 266
Bell System, War Activities of the...82–84
Bellefontaine Getting Ambitious..... 285
"Bessie's Burglar"* 46
Better Accounting, The Necessity for. By H. B. Warren..... 214
Biennial Meeting of Electrical Committee 53
Big Industrial Job for Stromberg..... 332
Big Men in Signal Corps..... 104
Big Four Telephone School..... 131
Bill for Municipal Ownership..... 70
Bill to Diminish Trade Paper Reading, A (editorial)..... 3
Bill for Iowa Commission..... 160
Bill for Call Registers in Massachusetts 206
Bill Forbids Rubbering, New York... 258
Billy Sunday Aids Connection..... 50
Blowing Up Ten Miles of German Trench* 209–210
Board at Park Falls, Kellogg*..... 146
Boarding House, Business Rates for.. 198
Bonds, Foreclose Home Telephone..... 280
Bonds, Municipal Purchase With..... 222
Bonds, S-C Employes Buy..... 45
Bonds, A. T. & T. Takes $5,000,000.... 206
Book Explains Taxes..... 293
Book Says Government Ownership Fails 100
Books, Spokane Company Distributes. 116
Bond Interest, Dividends and (editorial) 253
Brevities of the Business.....54–56, 110–114, 166–172, 227–230, 286–288, 336–338, **48–50 98–100, 148–150, 200–202, 251–252, 296–298**
Bristol-Cumberland Merger Discussed. 280
British Front, Telephone Operators on the 47
British Rates for U. S. Cables..... 296
British Colonial Telegraphs and Telephones.* By R. W. Weightman....89–97
Brownwood District of Texas Meets.. 196
Building, Omaha Gets Tall Telephone.. 70
Building Up Forces and Training of Men. By E. L. Smith.....263–265
Bureau of Standards on Cartridge Fuses 105
"Burglar, Bessie's"* 46
Business in Porto Rico..... 161
Business Rates for Boarding House... 178
Business Not as Usual (editorial)....51–52
Business Must Go On..... 300
Business in Detroit..... 10
Business Not as Usual (editorial)....51–52
"Business Rate?" Why Is a..... 54
Business, Brevities of the.....114, 166–172, 227–230, 286–288, 336–338, **48–50, 98–100, 148–150, 200–202, 251–252**
Buyer's Prophecy, A. By W. L. Chandler 157–159
Buys Rival, Cheadle-Sterritt Company. 66

C

Cable Terminals, Outdoor..... 289
Cable Telegraph Receiving, Radio Methods for* 269–270
Cable, Philadelphia-Atlantic City..... 214
Cable, To Locate Moisture in..... 12
Cable Messages, Telephone's Reception of 316
Cable, Mistakes, for Trolley..... 142
Cable, Photographs by*.....121–122
California Town Threatens Ownership 292
California Merging, More..... 334
Californians Petition for Connection... 198
California Merger, Protest..... 258
Calling Back 280
Call Registers in Massachusetts..... 206
Call Big Conference by Telephone..... 38
Call Recording Apparatus, Telephone*. 127
Call the Convention (editorial)..... 203
Cal., Venice, Merger Proposition in.... 206
Camp Greene, Service at..... 162
Camp, Texas Telephone Co. Equips.... 188
Camps, Service for the..... 302
Camp Wires, No Fooling on..... 335
Camp Dix, Equipment at..... 57
Camp Kelly, Telephone for..... 81
Camp Hancock Well Served..... 122
Cannot Visit Exchanges, Public..... 120
Canton Meet Talks Economy..... 206
Capitols, The Situation in European... 216
Car by Telephone, Sells..... 29
Carbosota, a Pole Preservative..... 223
Cars, Shock Absorbers on Telephone.. 161
Cartridge Fuses, Bureau of Standards on 105
Casler Working for Merger..... 18
Censorship, The Executive Order of... 335
Center in Exchange, Wisconsin Rurals to 267
Central Union Decision, The (editorial) 57–58
Central Union Holdings Void, A. T. & T.'s 61–65
Central Union Buys Competition..... 222
Central Union Case Again..... 324
Central Union Defeats Order..... 4
Central Union (editorial)..... 52
Central Union Divorced from Bell..55–57
Central Indiana Men Meet..... 92
Central Union Money, Dayton, Gets.... 130
Central Indiana, Fifty-five Meet in.... 210
Certificate of Necessity in Ohio..... 195
C. E. Heston Joins Signal Corps*..... 97
Changes in Minnesota Laws, Urge..... 204
Changes in Ohio, Independent..... 306
Chapters, A. A. E. Organizes Three New 197
Chart for Voltmeters, Resistance*..... 129
Change in Texas Commission Bill..... 132
Charging Storage Batteries in Exchanges.* By Q. A. Brackett..... 7–9
Cheadle-Sterritt Company Buys Rival. 66
Chicago's Telephone Progress..... 41
Chicago Convention, Kellogg At the*.. 56
Chicago to Great Lakes..... 287
Chicago Returns 292
Chicago's Telephone Progress..... 133
Chicago Rate Question Up..... 292
Chicago Bureau Useful, Report Proves 206
Chicago Telephone's Increases..... 268
Chicago Can Run Telephones, Says.... 126
Chicago Independent Would Quit..... 292
Chicago's New Telephone Building.... 283
Chicago, More Trouble in..... 81
Chicago, No Embargo Yet in..... 131
Chicago Publicity Man Dies..... 96
Chief Operator's Desk for Warsaw*.... 161
China Wants American Telephones.... 38
Christmas Bell, A. T. & T. Rings the.. 26
Chromium Steel Permanent Magnets.. 25
City Bill, Michigan Senate Defeats.... 236
City Wanted Abandon One Line..... 334
Circuits, Loaded Telephone.* By W. N. Furthman.....293–298, **27–32, 72–76**
Civil Service Examinations..... 43
Class A, Erie Mutual Enters..... 132
Clauses in Contracts and Order Blanks. By Elton J. Buckley..... 30
Cleveland, Competition Useful in..... 70
Cleveland Meeting Discusses Costs... 210
Closing Daytona Merger..... 100
Coast Defense System, The..... 116
Coast, Pioneering on the Pacific. By J. W. Gilkyson.....308–312
Coil, Stromberg-Carlson 10-A Repeating* 333
Coil, The Phantom*..... 197
Colonial Telegraphs and Telephones, British.* By R. W. Weightman..89–97
Colored Operators, Asks for..... 84
Columbus Municipal Movement..... 206
Columbus Wants Physical Connection. 125
Combined Drops and Jacks, Kellogg*. 284
Commercial Shortcomings of Engineers.* By Arthur Kneisel..... 98
Commission News. Public Utility.....43–47, 101–104, 154–156, 214–219, 281–283, 326–328, **39–43, 87–92, 137–141, 189–193, 241–245, 291–297**
Combination, New Bell..... 70
Commission, Not, Minnesota Companies Slow 126

322029

Commissions, The Monopolistic Tendencies of (editorial).....115–116
Commission Rules, Court Says..... 100
Commission's Investigation, Trade..... 138
Commissions, National Association of. 245
Commission Orders, Interstate Commerce 133–136
Commission Dominance, Gives Illinois. 266
Commission Bill, Change in Texas..... 132
Commission, Bill for Iowa..... 160
Commissions, Helping the (editorial)..
.....174–175
Committee, Telephone and Telegraph.. 9
Committee Meets, Independent Traffic. 25
Committee Reports, A. I. E. E..... 86
Committee for Private Service, Bar... 302
Communication Committee, State..... 4
Companies, Not Commission, Slow, Minnesota 126
Companies May Trim Trees..... 132
Competitive Rates, Northwestern Must Raise 120
Competition, Michigan Legislature Economizes 132
Competition, Speaking Falsely of a By Elton J. Buckley..... 148
Competition Useful in Cleveland..... 70
Competition of Service, Not Rates (editorial) 254
Competition, Central Union Buys..... 222
Compound for Rebuilding Dry Batteries 60
Conditions of Florida Merger..... 278
Conferences in Ohio in October..... 154
Conference, Call Big, by Telephone.... 38
Confer on Preparation, Independents.. 236
Confiscation, Wheeling Threatens..... 194
Congress Receives Lewis Bill..... 109
Connection Bill in Ohio..... 126
Connection at Owatonna, Court Orders 199
Consolidated Absorbs Rivals..... 204
Consolidated Case, Injunction in..... 266
Conservation of Battery Consumption* 329
Construction Discussed, Joint Pole..68–70
Construction Material and Pole Line Hardware 105–116
Constitutional Amendment Up..... 251
Construction Figures, A. T. & T..... 261
Contracts and Order Blanks, Clauses in. By Elton J. Buckley..... 30
Contribution to War, The Industry's (editorial) 289
Control, State versus Municipal Utility (editorial) 289–290
Control, State, or Federal?..... 65
Convention, Kellogg at the Chicago*.. 50
Convention, Exhibits at the..... 51
Conventions, Kellogg at State..... 107
Convention, The (editorial)..... 1
Convention, Don't Postpone the (editorial) 151–152
Convention, South Dakota..... 160
Convention, Independents Have Successful* 7–12
Convention in Indianapolis, Two-Day. 154
Convention This Month, Nebraska..... 17
Convention, The Madison..... 165
Convention Law in Ohio..... 186
Connection, Californians Petition for.. 198
Convention, Southern States in..... 270
Convention, Southern States..... 335
Connection, Farmer Sues for..... 4
Convention September 19, Indiana.... 94
Convention, No Pioneer..... 96
Convenient Battery Cell Tester..... 96
Convention Date Set, Indiana..... 144
Convention, Call the (editorial)..... 203
Co-operation and the Telephone. By N. C. Kingsbury.....141–146
Copper 329
Copper, Raw Materials—Especially .207–208
Cords, Testing of Its, by the Kellogg Company* 49
Cords, Taking the Twist Out of Flexible 36
Correspondence with the Front....129–130
Cost, Reducing Battery*..... 250
Costs, Cleveland Meeting Discusses... 210
Cost, Low Operating*..... 332
Couldn't Fool Uncle Joe..... 54
Courses at Dunwoody Institute, Telephone 338
Court Orders Connection at Owatonna. 199
Court Says Commission Rules..... 100
Court Allows Sale, Illinois..... 251
Courtesy, Operating 78
Courtesy, Supervising for. By Chas. M. Mantor 205–206
Crack Signal Corps..... 260
Crossings, Railroad* 217–222
Cumberland-Bristol Merger Discussed. 280
Current, Audibility, of a Telephone Receiver.* By E. W. Washburn..... 313
Cuzco, Peru, New System for..... 4
Cut-Over, The Indianapolis*.....185–186
Cut-Over, Indianapolis Automatic..... 225

D

Dakota Central Expanding..... 159
Dakota Rurals Under One Head..... 70
Dallas Company Gets Franchise..... 140
Dallas Company Wants New Franchise 109
Dallas Franchise, The..... 204
Dallas, No Referendum Probable in... 247
Damages, Fails to Sell; Gets..... 126
Damages, $5,000, For 20 Cents..... 86
Dayton Gets Central Union Money..... 130
Dayton Meeting Talks on Ownership... 210
Daytona Merger, Closing..... 100
Decator Merger Completed..... 188
Decisions, Effect of Recent, on Appraisals. By Philander Betts.....199–200
Decision, The Central Union (editorial) 57–58
Decorators Attack the Telephone..... 222
Decorative Effects, More..... 100
De Forest Wireless Telephone..... 108
Defense System, The Coast..... 116
Delaware Office, Kansas City, Stromberg Equipment for..... 163
Delay Is Fatal. By Terry W. Allen... 314
Delphos, Ohio, Stromberg Switchboard for* 162
Demands Physical Connection, Mayor.. 264
Denies Illinois Merger..... 266
Denver's Difficulties Approach Solution 267
Deny Union Affiliations, Operators.... 172
Depreciation Problem, The Importance of the (editorial)..... 152
Depreciation, Growth and.* By Julian Toebenstein 71–78
Depreciation Delays Michigan Decision 152
Dependents, War Service..... 97
Depreciation, Theoretical.* By James E. Allison.....230–238
Dept. of Agriculture Installs Stromberg-Inter-Comm-Phone System..... 248
Desk Sets, Early..... 38
Desk Type Switchboards*..... 52
Detectagraph, The Micro*..... 127
Detecting Submarines..... 104
Detroit Needs Operators..... 66
Detroit, To Re-Enact Ordinance in... 186
Detroit, Business in..... 10
Developments in Automatic Telephony, Recent.* By Arthur Bessey Smith 149–152
Diaphragm Thickness, Receives*...257–258
Dinner, Stromberg Gives Production*. 329
Directories, To Discourage Unofficial... 244
Direct Aircraft, Telephone Vibrations* 265–266
Directory Gives Transmission Hints... 284
Directories, One Cent..... 187
Discover Uninsulated Wire, Duty to.. 188
Disposal of Minor Rate Changes, The (editorial) 233
Dispatching in Parks, Road..... 54
Discrimination in Telephone Rates. By J. W. Howett..... 215
Divorced from Bell, Central Union....55–57
Dividends and Bond Interest (editorial) 253
Dixon Home Telephone Company, The*.59–62
"Doing Its Bit," The Telephone.* By W. N. Furthman.....11–12
Don't Be Mechanical..... 160
Don't Postpone the Convention! (editorial) 151–152
Drops and Jacks, Kellogg Combined*.. 284
Dry Batteries, Saving Telephone*..... 197
Dry Batteries, Compound for Rebuilding 60
Drifting, Where We Are. By Terry W. Allen 17–18
Dunwoody Institute, The..... 294
Dunwoody Institute, Telephone Courses at 338
DuPont Products Book..... 289
Du Pont Products, The..... 248
Duty to Discover Uninsulated Wire... 188

E

Early Desk Sets..... 38
Earnings Grow, Wire..... 236
Earnings, Ohio State..... 288
Earnings, Telephone Company..... 37
Eastern Traffic Association, The.* By H. E. Bradley.....83–87
Economy, Canton Meet Talks..... 206
Ed Mock (editorial)..... 1
Ed J. Mock Is Dead*..... 5
Effect of Recent Decisions on Appraisals. By Philander Betts.....199–200
Effect of War on England's Wires..277–278
Efficient, Making Telephone More..... 25
Efficient Pole Changer, An*..... 105
Egotism, An Injection of (editorial).173–174
Eight Ways to Save Gasoline..... 222
Electrical Committee, Biennial Meeting of..... 53
Elyria, Automatic for..... 85
Embargo Yet in Chicago, No..... 131
Emergency Messages for Navy Men.. 266
Employes All Volunteer, St. Louis.... 254
Employes, Promotion Plan for..... 92
Employes, Promotion of (editorial)... 102
Employes Buy Bonds, S-C..... 45
Employes Advised to Stick..... 144
Encyclopedia of Telephony, An*..... 293
Endorse American Telegraph Invention. 284
England's Wires, Effect of War on..277–278
Engineer in National Affairs, The. By H. W. Buck.....71–72
Engineer, Illinois Wants Railroad..... 250
Engineers, Commercial Shortcomings of.* By Arthur Kneisel..... 98
Engineering, The Study of..... 136
Enjoy "Intolerable" Privileges..... 285
Enlisted Men, Pay Increase for..... 292
Enlistments, Handling Independent.... 144
Equipment in Oklahoma, No..... 188
Equipment Used by the War Department (editorial).....232–233
Equipment at Camp Dix..... 57
Erie Mutual Enters Class A..... 132
Erie, Pa., Automatic for Mutual at.... 93
European Telephone Development.* By F. W. Scholz.....31–36, 79–82, 135–139, 191–195, 249–252, 303–307, 33–36, 77–81, 123–128, 173–176, 225–229, 267–270
European Capitals, The Situation in.... 216
Evolution in Public Utilities..... 178
Examination for Radio Inspector..... 250
Excess Profits Tax, A. T. & T..... 216
Exchange, Toledo Gets New..... 158
Exchanges, Public Cannot Visit..... 120
Exchanges, Charging Storage Batteries in.* By O. A. Brackett..... 7–9
Exchange Names, Prizes for.....24, 100
Exchange, Modernizing an..... 248
Executive Order of Censorship, The.... 335
Exhibits at the Convention..... 51
Exposition, The Rochester Industrial.. 198
Extension Service..... 223

F

Facilities in Michigan, Increasing..... 187
Fails to Sell; Gets Damages..... 126
Fakers Use Telephone..... 122
Farmers' Line, The Importance of the (editorial) 116
Farmers, Automatics for Ohio..... 145
Farmer Sues for Connection..... 4
Fatal, Delay Is. By Terry W. Allen... 313
Federal, State Control or..... 65
Field Artillery, 149th U. S., Kellogg Equipped* 247
Field Telephones, Red Cross Gets..... 22
Fifty-five Meet in Central Indiana.... 210
Final Stage of Los Angeles Merger... 224
Financed, American Telephone Well... 194
Financed, Montana Line Quickly..... 160
Financing, Ohio State..... 100
Fine for Rubbering, Wants to..... 66
Finding Operators..... 172
$5,000 Damages for 20 Cents..... 86
Flag, The Largest Service..... 288
Florida Bell Has Merging Franchise... 276
Franchise, Florida Bell Has Merging.. 276
Fleming, Professor, on Long Distance.. 10
Flood Lighting 97
Flood-Lighting* 162
Florida Merger, Conditions of..... 278
Forbids Rubbering, New York Bill..... 298
Foreclose Home Telephone Bonds..... 380
Forest, Telephones in the..... 125
Forty-Two Per Cent Independent (editorial) 175
Fooling on Camp Wires, No..... 335
Four and One-Half Per Cent. By W. N. Furthman 117–120
France, American Telephone in..... 206
Franchise, Dallas Company Gets..... 140
Franchise, The Dallas..... 204
Franchise, Dallas Company Wants New 109
Free Service, Samuel Hill Offers..... 78
Free Telegraph Instructions..... 295
Freight-Saving Wrinkles..... 246
Fremont, Ohio, Companies Get Together 132
Function of the Signal Corps, The. By Lieut. W. E. Palmer..... 5–6
Funeral Service Delivered via Telephone 126
Fuses, Bureau of Standards on Cartridge 105

G

Galesburg's Armored Cruiser..... 244
"Gas and Flame" Wants Men..... 290
Gas Masks Have Telephones..... 312
Gas Masks, Telephones in..... 67
Gasoline, Eight Ways to Save..... 222
Gear, Machine-Switching Telephone.* By F. R. McBerty.....255–260
Generator, A New Switchboard*..... 226
Generator, Motorcycle Wireless..... 172
Generator, Stromberg-Carlson New*... 145
German Trench, Blowing Up Ten Miles of* 209–210
Germany Sends Photos by Wire..... 208
Gettysburg, Telephones at..... 265
Girl, The Telephone..... 208
Gives Illinois Commission Dominance. 266
Gives Telephone Outfit, Patterson..... 162
Going Valve, The Item of. By Judge John Kermish.....245–247
Goose That Laid the Golden Eggs, The. By Terry W. Allen..... 147
Government and Labor, Our..... 131
Government Ownership, Green to Support 97
Government Ownership Fails, Book Says 100
Government Service First..... 26

Grain, Ohio State Shows..... 206
Grand Forks Urges Physical Connection 222
Grand Forks Wants Interconnection... 142
Great Lakes, Chicago to..... 287
Green to Support Government Ownership 97
Greene, Service at Camp..... 162
Growth and Depreciation.* By Julian Loebenstein 71–78
Guards for Big Toll Junctions, Ask... 278
G. W. Robinson Now Association President* 299–300

H

Hackettstown, N. J., Contract, Stromberg-Carlson Secures..... 165
Hancock, Camp, Well Served..... 122
Handling Independent Enlistments.... 144
Harding Addresses Ohio Men, Senator 256
Hardware, Pole Line, Construction Material and 105–116
Hawaii, History of the Telephone in. 253–254
Headquarters for Bell, Kansas..... 154
"Hello," Origin of the Word..... 152
Helping the Commissions (editorial). 174–175
Help U. S., Wire Lines Organize to... 186
Help, How Users Can..... 266
Help, How Operators Can..... 307
Helping Real Estate..... 67
Heston, C. E., Joins Signal Corps*..... 97
Higher Rates Needed..... 187
High Tension Circuits, Interference of. By O. A. Knell..... 189–190
High Resistance Railroad Telephones.. 32
Hill, Samuel, Retains Holdings..... 188
Hill, Samuel, Offers Free Service..... 78
History of the Telephone in Hawaii. 253–254
Holdings, Samuel Hill Retains..... 188
Home Burned; Lives Around Pole..... 285
Home Rule Suits in Michigan..... 256
Home Telephone Bonds, Foreclose.... 280
Honduras, Telephone Rates in..... 125
Hospital, New Radio for Base..... 224
House Moving Law, Minnesota..... 300
House Moving Case in Iowa..... 156
How, Telling the Public..... 159–161
How Users Can Help..... 266
How Operators Can Help..... 307
Hull Corporation Telephones..... 143

I

Illinois Commission Dominance, Gives. 266
Illinois Court Allows Sale..... 251
Illinois Independents Hold 13th Meeting 262
Illinois Merger, Denies..... 266
Illinois, Supplies Scarce in..... 190
Illinois Wants Railroad Engineer..... 250
Importance of the Depreciation Problem, The (editorial)..... 152
Importance of the Farmers' Line, The (editorial) 116
Improves Service, American Pep..... 199
Improvised Military Telephone Exchange, An* 129
Improvements, Southwestern Bell Making 147
Improvements in the Radio Telephone.* By Frank C. Perkins..... 157–158
Improvements at Warsaw..... 99
Improved Switchboard Arrestor, An*.. 225
Improvement?—Long Distance 240
Increasing Facilities in Michigan..... 187
Increase for Enlisted Men, Pay..... 292
Independents Have Successful Convention* 7–12
Independents Meet, Pennsylvania..... 142
Independent Enlistments, Handling... 144
Independent Changes in Ohio..... 206
Independent Traffic Committee Meets. 25
Independents Ready, Texas..... 70
Independent Would Quit, Chicago..... 292
Independents Voice Patriotism, Texas. 276
Independents Prepare, Pennsylvania.. 260
Independent Buys Bell Rival, Iowa... 268
Independent, Forty-Two Per Cent (editorial) 175
Independent Part in National Defense* 177
Independent Investments (editorial).. 232
Independents Confer on Preparation.. 236
Independents Meet, South Dakota..... 69
Independent Prospering, Louisiana... 87
Independent Association Joins National Chamber 131
Independents, Illinois, Hold 13th Meeting 262
Independent Buys Rival, Ohio..... 288
Indiana Bill Decreases Stock Liability 220
Indiana Managers and Operators Meet* 243–244
Indiana, Fifty-five Meet in Central.... 210
Indiana Convention Date Set..... 144
Indiana Women Don't Gossip..... 16
Indiana, Northern, Meeting..... 76
Indiana, Central, Men Meet..... 92
Indiana Convention September 19..... 94
Indiana Interconnections 15
Indianapolis, Two-Day Convention in. 154
Indianapolis, Kellogg at..... 198
Indianapolis Automatic Cut-Over..... 225
Indianapolis Cut-Over, The*..... 185–186
Inductive Interference 16
Industry's Contribution to War, The (editorial) 289
Industrial Job for Stromberg, Big... 332
"Industrial Management" 38
Injection of Egotism, An (editorial). 173–174
Injunction in Consolidated Case..... 266
Inspection Report, Pole Line Terminal* 12
Instruction, Phonetic Telegraph..... 162
Instructions, Western Union War..... 334
Insulated Wire Industry, The..... 294
Inspector, Examination for Radio..... 250
Instant Transmitter Repairs..... 246
In the Malay States..... 222
Intensified Telephoning in Los Angeles 195
Inter-Comm-Phone Apparatus 49
Interest to the Trade, Of*..49–53, 105–109, 161–165, 223–226, 284–285, 329–335, 44–47, 93–97, 145–147, 197–200, ... 246–251
Inter-Comm-Phone System, Dept. of Agriculture Installs Stromberg..... 248
Interstate Commerce Commission Reports 292
International Cable 295
Interest, Dividends and Bond (editorial) 253
Interconnection, Texas City Asks..... 86
Interstate Commerce Commission Orders 133–136
Interfering Company Liable..... 142
Interconnection, Grand Forks Wants.. 142
Interconnection, Oregon Men Reject.. 316
Interconnections, Indiana 15
Interference, Inductive 16
Interference of High Tension Circuits. By O. A. Knell..... 189–190
Invention, Endorse American Telegraph 284
Investigation, Trade Commission's... 136
Investigation of New England Company, No 126
Investigation, "Leak," Invades Telephone Company 130
"Invested — Would I Have?" (editorial) 203–204
Investments, Independent (editorial).. 232
Iowa, New Companies Still Interest... 70
Iowa, Rural Lines Win in..... 109
Iowa Insists on Telephones..... 258
Iowa, House Moving Case in..... 156
Iowa Commission, Bill for..... 160
Iowa Independent Buys Bell Rival.... 268
Iowans, Telephone Jobs for..... 307
Iowa Rurals Get Together..... 22
Iowa's Big Merger..... 22
Item of Going Value, The. By Judge John Kermish 245–247

J

Jacks, Kellogg Combined Drops and*.. 284
Japanese, Sell Numbers Like..... 238
Jobs for Iowans, Telephone..... 307
Joint Pole Construction Discussed.. 68–70
Joint Use of Poles, The.* By J. E. McDonald 262–264
Joint Use of Poles. By L. C. Eddy... 88
Joplin Zone System Protested..... 190
Joplin Zone System is Compromised... 267
Junking Privilege, $200,000..... 20

K

Kansas Headquarters for Bell..... 154
Kansas City, Stromberg Equipment for Delaware Office 163
Kansas, Tornado Effects in..... 22
Keep Off the Line, When to..... 6
Kellogg Advertising Slides, New*..... 95
Kellogg at Louisville*..... 44
Kellogg Apparatus Catalog, New*..... 46
Kellogg Switchboard, Records on..... 145
Kellogg at Park Falls*..... 146
Kellogg Equipped, 149th U. S. Field Artillery* 247
Kellogg's Red Cross Records..... 94
Kellogg at State Conventions..... 107
Kellogg Combined Drops and Jacks*.. 284
Kellogg at the Chicago Convention*... 50
Kellogg Transmitter Stands Fire Test* 290
Kellogg at Indianapolis..... 198
Kellogg Company, Testing of Its Cords by the* 49
Kentucky Merger Law Carries..... 258
Keystone Statement 194
Key Shelves, Standardization of*..... 224
Khaki At the Switchboard..... 301–302
Kinlock Stockholders Meet..... 100
Klein, Mathias, Retires; Sons Continue 284

L

Labor, Our Government and..... 131
Labor, The Attitude of, In Emergency (editorial) 204
Labor on Pole Holes, Saving. By J. B. Stoneking 317–318
Labor Case, The Toledo..... 319–324
Labyrinth, The. By Terry W. Allan.. 48–49
Landskrona, Sweden, Semi-Automatic Operation* 177–187
Law Book, Telephone, Second Edition of 87
Law, Connection, in Ohio..... 186
Law, Minnesota House Moving..... 300
Law, Public Utilities and the. By E. W. Cunningham 23–24
Laws, Urges, Changes in Minnesota... 204
Large P. A. X. Installations..... 246
Largest Service Flag, The..... 288
"Leak" Investigation Invades Telephone Company 130
Legislature Encourages Competition, Michigan 132
Letter Postage Increase..... 246
Lewis Bill, Congress Receives..... 109
Liability, Indiana Bill Decreases Stock 220
Liable, Interfering Company..... 142
Liberty Loan, Support the..... 292
Liberty Bonds, Southern Bell Advertises 324
Lighting, Flood* 162
Lighting, Flood 97
Like Japanese, Sell Numbers..... 238
Lima District Elects Officers..... 240
Lineman, The Soldier. By Capt. A. A. Jayne 201–202
Lines, Rural, Win in Iowa..... 109
Line, When to Keep Off the..... 6
Liquidation, Los Angeles..... 142
Listening on Telephones..... 300
Loading Coils versus Repeaters. By W. N. Furthman..... 259–261
Load, Scatter the Peak (editorial).. 101–102
Loaded Telephone Circuits.* By W. N. Furthman 293–298, 27–32, 72–76
Locate Moisture in Cable, To..... 12
Look for the Difference..... 10
Long Distance Improvement?..... 240
Long Distance Operating, Rules for.* By W. S. Vivian..... 37–38
Long Distance, Professor Fleming on. 10
Lord Northcliffe Uses Transcontinental 96
Los Angeles, Merger Settled..... 38
Los Angeles Merger, Progress of..... 280
Los Angeles Liquidation..... 142
Los Angeles Merger, Final Stage of... 224
Los Angeles Merger Up to U. S..... 133
Los Angeles, Intensified Telephoning in 195
Losses, Telephone Transmission. By K. Ogawa and T. Arakawa..... 163–172
Louisville, Kellogg at*..... 44
Louisiana Independent Prospering.... 87
Louisiana, Merger in..... 120
Low Operating Cost*..... 332

M

Machine-Switching Telephone Gear.* By F. R. McBerty..... 255–260
Madagascar, Telephones on the Isle of. 17
Madison Convention, The..... 165
Madison, Summer School at..... 4
Magnet Wire Small, Supply of..... 186
Magnets, Chromium Steel Permanent.. 25
Making Telephone More Efficient..... 25
Making Telegraph Operators..... 116
Malay States, In the..... 222
Managers and Operators Meet, Indiana* 243–244
Management, Scientific, in Automatic Exchanges.* By W. Lee Campbell.. 27–29
Marshfield, Wis., Meeting at..... 245
Masks, Gas, Have Telephones..... 312
Massachusetts Inquiry, War May Stop. 236
Massachusetts, Bill for Call Registers in 206
Materials, Priority Rights to (editorial) 253
Materials, Raw,—Especially Copper. 207–208
Mathias Klein Retires; Sons Continue.. 284
Mayor Demands Physical Connection.. 264
May Install Telautograph in Senate.. 69
McQuarrie on Switching Systems..... 128
Measurements, Skin-Effect Resistance.* By A. E. Kennelly and H. A. Affel. 207-212, 271–276
Medal for A. G. Bell..... 220
Meeting at Marshfield, Wis..... 245
Men, U. S. Needs Telephone..... 267
Men in Signal Corps, Big..... 104
Men, Pay Increase for Enlisted..... 292
Men, Building Up Forces and Training of. By E. L. Smith..... 263–265
Merger Situation, Austin's..... 66
Merger, Closing Daytona..... 100
Merger in Louisiana..... 120
Merger, Pennsylvania's Rural..... 126
Merger in Tennessee..... 152
Merger Completed, Decatur..... 188
Merger, Conditions of Florida..... 278
Merger Up to U. S., Los Angeles..... 133
Merger Off, One Texas..... 9
Merger, Casler Working for..... 18
Merger, Iowa's Big..... 22
Merger Settled, Los Angeles..... 38
Mergers Go On, The (editorial)..... 102
Merger Proposition in Venice, Cal..... 200
Merger, Final Stage of Los Angeles... 224

Merging, More California..... 334
Merger, Protest California..... 258
Merger, Santa Monica Wants..... 258
Merger, Progress of Los Angeles..... 280
Merger Discussed, Bristol-Cumberland 280
Merger Probable, Beaumont, Texas... 247
Merger Completed, South Bend..... 287
Merger, To Resist South Bend..... 213
Merger, New York State..... 288
Merger, Virginia-Tennessee..... 122
Merger, Denies Illinois..... 266
Merger Law Carries, Kentucky..... 258
Merging Franchise, Florida Bell Has.. 276
Messages for Navy Men, Emergency.. 266
Metal Telephone Parts, Welding*..... 249
Michigan Decision, Depreciation Delays 152
Michigan Legislature Encourages Competition 132
Michigan, Home Rule Suits in..... 256
Michigan, Increasing Facilities in..... 187
Michigan Municipal Bill Discussed..... 212
Michigan, Physical Connection Wins In 23–26
Michigan Senate Defeats City Bill..... 236
Michigan Stands for Physical Connection (editorial) 2
Micro-Detictagraph, The*..... 122
Military Telephone Exchange, An Improvised* 129
Milwaukee, More Wires Out of..... 213
Mine Telephones, Uses for Stromberg.. 44
Minnesota Orders Physical Connection 121–125
Minnesota Companies, Not Commission, Slow 126
Minnesota Laws, Urges Changes in..... 204
Minnesota Toll Rates Unchanged..... 276
Minnesota House Moving Law..... 300
Minnesota, 1,735 Companies in..... 318
Mishawaka Emulates South Bend..... 238
Mistakes Cable for Trolley..... 142
Mobilize Operators for War..... 261
Mock, Ed (editorial)..... 1
Mock, Ed J., Is Dead*..... 5
Modern Sand Storm, A*..... 107
Modernizing an Exchange..... 248
Moisture in Cable, To Locate..... 12
Monopolistic Tendencies of Commissions, The (editorial)..... 115–116
Monument Unveiled, Bell..... 266
Montana Line Quickly Financed..... 160
Moral Welfare Talks for Operators..... 141
More California Merging..... 334
More Decorative Effects..... 100
More Operators for Washington..... 266
More Railway Telephones..... 54
More of That Small Town Stuff..... 210
More Trouble in Chicago..... 81
More Wires Out of Milwaukee..... 213
Motor Trucks, Advantages of..... 81
Motor Vehicle Question, The (editorial) 52
Motorcycle Wireless Generator..... 172
Move to Abolish Moving Day..... 188
Moving Day, Move to Abolish..... 188
Moving Train, Telephoning from..... 136
Movement Endorsed, A..... 134
Multi-Call Signal, Novel*..... 53
Municipal Bill Discussed, Michigan..... 212
Municipal Movement, Columbus..... 206
Municipal Ownership Bill, Ohio Has.. 152
Municipal Ownership, Spokane Preparing for..... 120
Municipal Ownership Agitation..... 194
Municipal Ownership, Bill for..... 70
Municipal Purchase Without Bonds... 222
Municipal Utility Control, State Versus (editorial) 289–290
Must Supply Telephones, Nebraska Railroads 66
Mutual, Erie, Enters Class A..... 132
Mutual at Erie, Pa., Automatic for.... 93

N

Names Prizes for Exchange.....24, 100
Nation, The Nerves of the. By F. N. Bethell 315–316
Nation, Service for the (editorial).. 231–232
National Affairs, The Engineer in. By H. W. Buck 71–72
National Association of Commissions.. 245
National Chamber, Independent Ass'n Joins 131
National Defense, Independent Part in* 177
National Service..... 283
Navy Men, Emergency Messages for.. 266
Nebraska Convention This Month..... 17
Nebraska Railroads Must Supply Telephones 66
Necessity for Better Accounting, The. By H. B. Warren 214
Needed, Higher Rates..... 187
Needs Telephone Men, U. S..... 267
Needs Operators, Detroit..... 66
Negotiate? Why. By Jerry W. Allen... 99
Nerves of the Nation, The. By F. N. Bethell 315–316
New Mexican Telephones, Value..... 30
New Bell Combination..... 70
New Radio for Base Hospital..... 224
Newark Automatic Growing 130
New Company Still Interest Iowa..... 70
New England Company, No Investigation of 126
New Kellogg Advertising Slides*..... 95
New Kellogg Apparatus Catalog*..... 46
New System for Cuzco, Peru..... 4
New Switchboard Generator, A*..... 226
New Telephone Building, Chicago's.... 283
New York Rate Equalizer Voted..... 18
New York State Merger..... 288
New York Subway, Telephones for..... 4
New York Has Rate Determination Bill. 318
New York's Signal Volunteers..... 298
New York Bill Forbids Rubbering..... 298
New York's Report..... 172
News from the Field....54–56, 111–114, 167-172, 286-288, 336–338, 49–50, 98–100, 149–150, 200–202, 251–252, 297–298
Night Service Difficulties in Washington 200
Night Work Bill in Pennsylvania, Anti- 125
No Embargo Yet in Chicago..... 131
No Equipment in Oklahoma..... 188
No Fooling on Camp Wires..... 335
No Investigation of New England Company 126
No Pioneer Convention 96
No Referendum Probable in Dallas... 247
Normal Times 199
Northcliffe Uses Transcontinental, Lord 96
North Dakota Taxes Higher..... 130
North Dakotians Hold Session.....21–22
North, Railway Telephones in the Far. 160
Northern Indiana Meeting 76
Northwestern Making Rural Friends.. 24
Northwestern Bell to Expand..... 30
Northwestern Must Raise Competitive Rates 120
Novel Multi-Call Signal*..... 53
Number of Poles Needed..... 87

O

Observations on the A. T. & T., Some. By Terry W. Allen.....187–188
Obsolescence as Affecting Rates. By L. E. Grunsky.....223–224
October, Conferences in Ohio in..... 154
Of Interest to the Trade*...49-53, 105-109, 161–165, 223–226, 284–285, 329–335, 44–47, 93–97, 145–147, 197–200, 246–251
Office, An 291
Officers, Lima District Elects..... 240
Ohio Association for Politics..... 190
Ohio Companies Get Together, Ohio... 132
Ohio, Certificate of Necessity in..... 195
Ohio, Connection Law in..... 186
Ohio, Connection Bill in..... 126
Ohio Has Municipal Ownership Bill... 152
Ohio, Independent Changes in..... 206
Ohio Independent Buys Rival..... 288
Ohio Farmers, Automatics for..... 145
Ohio in October, Conferences in..... 154
Ohio Men, Senator Harding Addresses. 256
Ohio State Financing 100
Ohio State Earnings 288
Ohio State Shows Gain..... 206
Oil City, Stromberg Board for..... 289
Oklahoma, No Equipment in..... 188
Old Days, Sounds Like the..... 245
Omaha Gets Tall Telephone Building.. 70
Omaha Strong on Telephones..... 97
One Texas Merger Off..... 9
Operators, Asks for Colored..... 84
Operators Can Help, How..... 307
Operating Cost, Low*..... 332
Operating Courtesy 78
Operators Deny Union Affiliations.... 172
Operators, Detroit Needs 66
Operators, Finding 172
Operators, Making Telegraph..... 116
Operators Meet, Indiana Managers and* 243–244
Operators Meet, Wisconsin..... 134
Operators, Moral Welfare Talks for.. 141
Operator and Her Work, The.* By J. H. Corcoran 67–69
Operators on the British Front, Telephone 47
Operating Railway Selectors Without Batteries.* By J. G. Wray.....196–198
Operators in Russian Revolution..... 16
Operating, Rules for Long Distance.* By W. S. Vivian.....37-38
Operators Wanted for France..... 291
Operators for Washington, More..... 266
Opportunity in Air Service..... 291
Optophone, Selenium and the*.....271–272
Operators for War, Mobilize..... 261
Order Blanks, Clauses in Contracts and. By Elton J. Buckley 30
Order of Censorship, The Executive... 335
Orders Connection at Owatonna, Court. 199
Orders, Interstate Commerce Commission 133–136
Orders Physical Connection, Minnesota 121–125
Oregon Men Reject Interconnection... 316
Ordinance in Detroit, To Re-Enact... 186
Organize to Help U. S. Wire Lines.... 186
Origin of the Word "Hello"..... 152
Outdoor Cable Terminals..... 289
Our Government and Labor..... 131
Outfit, Patterson Gives Telephone..... 162
Our Association, Its Powers and Responsibilities.* By F. B. MacKinnon 18–22
Ownership Bill, Ohio Has Municipal... 152
Ownership, Bill for Municipal..... 70
Owatonna Case Gone to Trial..... 132
Owatonna, Court Orders Connection at. 199
Ownership, Dayton Meeting Talks on. 210
Ownership Fails, Book Says Government 100
Ownership, Green to Support Government 97
Ownership, Municipal, Agitation 194
Ownership, Spokane Preparing for Municipal 120
Ownership, Sunny on State..... 69
149th U. S. Field Artillery Kellogg Equipped* 247

P

Pacific Coast Labor Agreement..... 295
Pacific Coast, Pioneering on the. By J. W. Gilkyson 308–312
Pamphlet in Colors, Switchboard*..... 289
Parts, Welding Metal Telephone*..... 249
Park Falls, Kellogg Board at*..... 146
Parks, Road Dispatching in..... 54
Patents Issued Recently, Telephone.* By David S. Hulfish..42–43, 153–154, 213–214, 279–280, 325–326, 37, 85, 143, ...195, 239–240
Patterson Gives Telephone Outfit..... 162
Patriotism, Texas Independents Voice. 276
Pay Increase for Enlisted Men..... 292
Pay Telephones, Would Regulate..... 120
Peak Load, Scatter the (editorial).101–102
Pennsylvania Independents Meet..... 142
Pennsylvania Rates Worked Out..... 302
"Pennsy" Ry. Equips Another Division 162
Pennsylvania, Anti-Night Work Bill in 125
Pennsylvania's Rural Merger..... 126
Pennsylvania Independents Prepare... 260
Pennsylvania Bell Rates Ordered Down 268
Pep Improves Service, American..... 199
Percentages, Telephone 276
Personal Notes..110–111, 166–167, 286, ..336, 48, 98, 148–149, 200, 251–252, 296–297
Peru, Cuzco, New System for..... 4
Petition for Connection, Californians.. 198
Petition Congress for War Law..... 279
Phantom Coil, The*..... 197
Philadelphia-Atlantic City Cable 214
Phonetic Telegraph Instruction..... 162
Photographs by Cable*.....121–122
Photos by Wire, Germany Sends..... 208
Physical Connection, Michigan Stands for (editorial) 2
Physical Connection, Columbus Wants. 125
Physical Connection, Studying..... 199
Physical Connection, Minnesota Orders 121–125
Physical Connection, Grand Forks Urges 222
Physical Connection Wins in Michigan 23–26
Physical Connection, Mayor Demands.. 264
Physical Connection Bill in Tennessee. 220
Pictures, Stories in*...4, 118–119, 176, ...234–235, 291, 3, 53, 103, 153, 205, 255
Pioneer Convention, No..... 96
Pioneering on the Pacific Coast. By J. W. Gilkyson 308–312
Pole Prices Raised..... 262
Pole Sign Post, A Telephone..... 6
Pole, Joint, Construction Discussed..68–70
Pole Line Hardware, Construction Material and 105–116
Pole Changer, An Efficient*..... 105
Pole Holes, Saving Labor on. By J. B. Stoneking 317–318
Pole Preservative, Carbosota a..... 223
Pole Line, Terminal, Inspection Report* 12
Poles, Joint Use of. By L. C. Eddy... 88
Poles, Joint Use of.* By J. E. McDonald 262–264
Poles Purchased in 1915. By Arthur M. McCreight 59–60
Poles Needed, Number of..... 87
Politics, Ohio Ass'n for..... 190
Population 153,000,000 in 1940..... 161
Portland Reorganization 97
Porto Rico, Business in..... 161
Portland Home Reorganization..... 6
Postage Increase, Letter 248
Postal Increasing Telephone Activity. 244
Postpone the Convention, Don't (editorial) 151–152
Prepare, Pennsylvania Independents.... 260
Preparedness. By Terry W. Allen..... 261
Preparation, Independents Confer on... 236
Present Day Radio Apparatus..... 288
Preservative Process, The..... 44
Preservative, Carbosota a Pole..... 223
President, G. W. Robinson Now Association* 299–300
Press Helps, The Trade..... 249
Press, Telephone Companies and the Local. By Wallace Meyer.....221-222
Prevention, Accident, in the Telephone Field. By J. F. Nayton.....211–213

Prices Raised, Pole 262
Priority Rights to Materials (editorial) 253
Private Service, Bar Committee for.... 302
Prizes for Exchange Names.....24, 100
Probe, Telephone Surgical..... 29
Problem, The Importance of the Depreciation (editorial) 152
Process, The Preservative..... 44
Products, The Du Pont..... 248
Production Dinner, Stromberg Gives*.. 329
Professor Fleming on Long Distance.. 10
Profits Tax, A. T. & T..... 261
Progress of Los Angeles Merger..... 280
Progress, Chicago's Telephone..... 133
Progress, Chicago's Telephone..... 41
Prompt Shipments* 94
Promotion of Employes (editorial).... 102
Promotion Plan for Employes..... 92
Prophecy, A Buyer's. By W. Q. Chandler 157–159
Protecting the Telephone..... 270
Protest California Merger..... 258
Public Service Selling Methods.....39–41
Public Cannot Visit Exchanges..... 120
Public Utilities, Evolution in..... 178
Public How, Telling the.....159–161
Publicity Man Dies, Chicago..... 96
Public Utilities and the Law. By E. W. Cunningham 23–24
Public Utility Commission News.43–47, 101–104, 154–156, 214–219, 281–283, 326–328, 39–43, 87–92, 137–141, 189–.....193, 241–245
P. A. X. Installations, Large..... 246

R

Radio Apparatus, Present Day..... 288
Radio Inspector, Examination for..... 250
Radio for Base Hospital, New.....224
Radio Telephone, Improvements in the.* By Frank C. Perkins.....157–158
Radio Methods for Cable Telegraph, Receiving* 269–270
Railroad Crossings* 217–222
Railroad Engineer, Illinois Wants.... 250
Railroad Telephones, High Resistance 32
Railroads Must Supply Telephones, Nebraska 66
Railway, Automatics for..... 70
Railway Selectors Without Batteries, Operating.* By J. G. Wray.....196–198
Railway Telephones in the Far North. 160
Railway, "Pennsy," Equips Another Division 162
Railway Telephones, More..... 54
Raise Wires for Ranchers' Convenience 188
Raise Rates, The Way to (editorial).. 58
Ranchers' Convenience, Raise Wires for 188
Ranges, Target, Get Telephones..... 251
Rate Changes, The Disposal of Minor (editorial) 233
Rate Raise, Reasons for..... 147
Rates in Honduras, Telephone..... 125
Rates, Competition of Service, Not (editorial) 254
Rates, Obsolescence as Affecting. By C. E. Grunsky 223–224
Rates, Discrimination in Telephone. By J. W. Howett 215
Rate Equalizer Voted, New York..... 18
Rate Determination Bill, New York Has 318
Rate Raising, The Resistance to (editorial) 117
Rates Worked Out, Pennsylvania..... 302
Rates, Business, for Boarding House.. 198
Rates Unchanged, Minnesota Toll.... 276
Rates Ordered Down, Pennsylvania Bell 268
Rates, Stationary, Supplies Doubles.. 222
Rates, Northwestern Must Raise Competitive 120
Rates, The Way to Raise (editorial).. 58
Rates Needed, Higher 187
Raw Materials—Especially Copper.207–208
Real Estate, Helping 67
Reasons for Rate Raise..... 147
Rebuilding Dry Batteries, Compound for 60
Recent Developments in Automatic Telephoning.* By Arthur Bessey Smith 149–152
Reception of Cable Messages, Telephones 316
Receiver, Audibility Current of a Telephone.* By E. W. Washburn..... 313
Receiver Diaphragm Thickness*....257–258
Records on Kellogg Switchboard*..... 145
Recorder of Wave Forms, Tuning Fork* 130
Recording Apparatus, Telephone Call*. 127
Red Cross Records, Kellogg's..... 94
Red Cross Gets Field Telephones..... 22
Reducing Battery Cost*..... 250
Re-Enact Ordinance in Detroit, To.... 186
Reel Connected to Engine..... 38
Referendum Probable in Dallas, No... 247
Regular Dividend for Chicago..... 292
Regulate Pay Telephones, Would..... 120
Registers in Massachusetts, Bill for Call 206
Reminder, War Tax 206
Reorganization, Portland 97
Reorganization, Portland Home..... 6
Repairs, Instant Transmitter 246
Repairers Are Busy, Telephone..... 96
Repeating Coil, Stromberg-Carlson 10-A* 333
Repeaters, Loading Coils versus. By W. N. Furthman.....259–261
Report Proves Chicago Bureau Useful. 206
Report, The Annual Bell.....179–184
Reports, A. I. E. E. Committee..... 86
Resistance Chart for Voltmeters*.... 129
Resistance to Rate Raising, The (editorial) 117
Resistance Measurements, Skin-Effect.* By A. E. Kennelly and H. A. Affel.. ..... 207–212, 271–276
Resist South Bend Bend Merger, To.. 213
Rights to Materials, Priority (editorial) 253
Riverside, Sunset Absorbs 70
Road Dispatching in Parks..... 54
Robinson, G. W., Now Association President* 299–300
Robbing Peter to Put Paul Out of Business (editorial) 2
Rockford's Camp is Wired..... 62
Rochester's New Equipment..... 224
Rochester Industrial Exposition, The.. 198
Rubbering, Wants to Fine for..... 66
Rubbering, New York Bill Forbids.... 298
Rules for Long Distance Operating.* By W. S. Vivian.....37–38
Rural Lines Win in Iowa..... 109
Rural Merger, Pennsylvania's..... 126
Rural Telephone, Storage Batteries for.* By H. E. Brockwell..... 128
Rural Friends, Northwestern Making.. 24
Rurals Get Together, Iowa..... 22
Rurals to Center in Exchange, Wisconsin 267
Rurals Under One Head, Dakota..... 70
Russia and Scandinavia, Telephone Development in. By W. H. Gunston.139–140
Russian Revolution, Operators in..... 16

S

St. Louis Employes All Volunteer... 254
Sale, Illinois Court Allows..... 251
Samuel Hill Offers Free Service..... 78
Samuel Hill Retains Holdings..... 188
Sand Storm, A Modern*..... 107
Santa Monica Wants Merger..... 258
Save Gasoline, Eight Ways to..... 222
Saving Labor on Pole Holes. By J. B. Stoneking 317–318
Saving Telephone Dry Batteries*..... 197
Says Chicago Can Run Telephones.... 126
Scandinavia's Telephone Trade.* By E. A. Brofos 203–204
Scandinavia, Telephone Development in Russia and. By W. H. Gunston..139–140
Scatter the Peak Load (editorial)..101–102
S-C Bulletin, Another* 45
S-C Employes Buy Bonds..... 45
S-C Equipment, Utica Company Buys.. 46
School, Big Four Telephone..... 131
School at Madison, Summer..... 4
Scientific Management in Automatic Exchanges.* By W. Lee Campbell.27–29
Scrap Book, The Telephone*.....127–130
Second Edition of Telephone Law Book 87
Second Line of Defense, The*..... 38
Selenium and the Optophone*.....271–272
Selectors Without Batteries, Operating Railway.* By J. G. Wray.....196–198
Sell Numbers, Like Japanese..... 238
Sell, Fails to; Gets Damages..... 126
Selling Methods, Public Service.....39–41
Sells Car by Telephone..... 29
Semi-Automatic Operation, Landskrona, Sweden* 177–187
Senate Defeats City Bill, Michigan.... 236
Senate, May Install Telautograph in.. 69
Senator Harding Addresses Ohio Men. 256
Service, American Pep Improves..... 199
Service at Camp Greene..... 162
Service First, Government 26
Service Flag, The Largest..... 288
Service for the Nation (editorial)..231–232
Service for the Camps..... 302
Service, Not Rates, Competition of (editorial) 254
Service, National 283
Seven Per Cent. A. T. & T. at..... 162
1,735 Companies in Minnesota..... 318
Shipments, Prompt* 94
Shock Absorbers, Stromberg-Carlson*. 226
Shock Absorbers on Telephone Cars.. 161
Shooting Trouble in Front of the Guns (editorial) 1
Shunts and Short Circuits..... 132
Short Circuits, Shunts and..... 132
Shortcomings of Engineers, Commercial.* By Arthur Kneisel 98
Sign Post, A Telephone Pole..... 6
Signal Corps, C. E. Heston Joins*.... 97
Signal Corps, The Function of the. By Lieut. W. E. Palmer..... 5–6
Signal Corps, Big Men In..... 104
Signal, Novel Multi-Call* 53
Signal Corps, Coast 260
Signal Volunteers, New York's..... 298
Signal Service Reserve Corps..... 248
Silent Salesmen, Stromberg's..... 285
Silver Anniversary, Automatic's*..... 106
Situation in European Capitols, The... 216
Skin-Effect Resistance Measurements.* By A. E. Kennelly and H. A. Appel. 207–212, 271–276
Sky Line, Telephones and the..... 267
Slacker, The Telephone versus the*..19–20
Smallest Company, The 244
Small Town Stuff, More of That..... 210
Small Town Stuff 316
Social Reconstruction, The Telephone and. By John Lee.....63–67
Soldier Lineman, The. By Capt. A. A. Jayne 201–202
Some Observations on the A. T. & T. By Terry W. Allen.....187–188
Sounds Like the Old Days..... 245
South Bend Merger Completed..... 287
South Bend, Mishawake Emulates..... 238
South Bend Merger, To Resist..... 213
South Dakota Independents Meet..... 69
South Dakota Convention 160
Southern Bell Advertises Liberty Bonds 324
Southern States Convention 335
Southern States in Convention..... 270
Southwestern Bell Making Improvements 147
Speaking Falsely of a Competitor. By Elton J. Buckley 148
Speech, The Art of..... 202
Spokane Company Distributes Books.. 116
Spokane Preparing for Municipal Ownership 120
Stage Lighting, Telephone Aids..... 128
Standard Telephone Repair Moves*.... 146
Standardization of Key Shelves*..... 224
State Control or Federal..... 65
State Conventions, Kellogg at..... 107
Statement, Keystone 194
State Communication Committee 4
State Ownership, Sunny on..... 69
State versus Municipal Utility Control 289–290
Statistics, B. C. Telephone Company.. 159
Stockholders, A. T. & T..... 262
Stockholders Meet, Kinloch 100
Stock Liability, Indiana Bill Decreases 220
Storage Batteries in Exchanges, Charging.* By L. A. Brackett..... 7–9
Storage Batteries for Rural Telephones.* By H. E. Brockwell..... 128
Stories in Pictures*.....4, 118–119, 176, 234–235, 291, 3, 53, 103, 153, 205
Strand, Tension in Suspension.* By L. C. Eddy, Jr..... 132
Strike, Toledo's 5
Stromberg Mine Telephones, Uses for. 44
Stromberg-Carlson New Generator*... 145
Stromberg-Carlson 10-A Repeating Coil* 333
Stromberg-Carlson Shock Absorbers*.. 226
Stromberg-Carlson Secures Hackettstown, N. J., Contract..... 165
Stromberg Equipment for Delaware Office, Kansas City..... 163
Stromberg Board for Oil City..... 289
Stromberg Gives Production Dinner*.. 329
Stromberg, Big Industrial Job for.... 332
Stromberg Inter-Comm-Phone System, Department of Agriculture Installs.. 248
Stromberg's Silent Salesmen 285
Stromberg Switchboard for Delphos, Ohio* 162
Student Club, American Association of Engineers Forming 17
Study of Engineering, The..... 136
Studying Physical Connection..... 199
Submarines, Detecting 104
Subscribers Ask New Switchboard..... 195
Subway, Telephones for New York.... 4
Success, Will Power and..... 208
Success 251
Successful Advertising Booklet, A*.... 164
Suggests Tax Changes 144
Summer School at Madison 4
Sunday, Billy, Aids Connection..... 50
Sunny on State Ownership..... 69
Sunny on Universal Service..... 247
Sunset Absorbs Riverside 70
Supervising for Courtesy. By Chas. M. Mantor 205–206
Supplies Doubled, Rates Stationary.... 222
Supplies Scarce in Illinois..... 190
Supply of Magnet Wire Small..... 186
Support the Liberty Loan..... 292
Surgical Probe, Telephone 29
Suspension Strand, Tension in.* By L. C. Eddy, Jr..... 132
Sweden, Semi-Automatic Operation, Landskrona* 177–187
Switchboard Arrester, An Improved*. 225
Switchboard Generator, A New*..... 226
Switchboard, Khaki at the.....301–302
Switchboards, Desk Type*..... 52
Switchboard Pamphlet in Colors*..... 289
Switchboard, Records on Kellogg..... 145
Switchboard, Subscribers Ask New.... 195
Switzerland, Telephone Time Service in 196
Switchboard, Stromberg, for Delphos, Ohio* 162
Switching Systems, McQuarrie on..... 128

T

Taking the Twist Out of Flexible Cords 36
Talks for Operators, Moral Welfare... 141
Target Ranges Get Telephones..... 251
Tax, A. T. & T. Excess Profits..... 216
Tax, A. T. & T. Profits..... 261
Tax Bill, The War..... 141
Tax Changes, Suggests 144
Tax Reminder, War 206
Tax, The Telephone 298
Tax, The War..... 333
Taxes Higher, North Dakota..... 130
Telautograph in Senate, May Install.. 69
Telegraph Committee, Telephone and.. 9
Telegraph Instruction, Phonetic 162
Telegraph Lines, Telephonize All the (editorial) 290
Telegraph Line Dispute 96
Telegraph Operators, Making 116
Telegraph Receiving, Radio Methods for Cable* 269–270
Telegraphs and Telephones, British Colonial.* By K. W. Weightman....89–97
Telegraph Invention, Endorse American 284
Telephone Activity, Postal Increasing.. 244
Telephone Aids Stage Lighting..... 128
Telephone and Telegrapn Committee.. 9
Telephone and Social Reconstruction, The. By John Lee.....63–67
Telephone Building, Chicago's New.... 283
Telephone Call Recording Apparatus*. 127
Telephone Cars, Shock Absorbers on.. 161
Telephone Circuits, Loaded.* By W. N. Furthman 293–298, 27–32, 72–76
Telephone Companies and the Local Press. By Wallace Meyer 221–222
Telephone Company Earnings 37
Telephone, Co-operation and the. By N. C. Kingsbury 141–146
Telephone Courses at Dunwoody Institute 338
Telephone, Decorators Attack the.... 222
Telephone Development, European.* By F. W. Scholz.....31–36, 79–82, 135–139, 191–195, 249–252, 303–307, 33–36, 77–81, 123–128, 173–176, 225–229
Telephone Development in Russia and Scandinavia. By W. H. Gunston.139–140
Telephone "Doing Its Bit," The.* By W. N. Furthman 11–12
Telephone Dry Batteries, Saving*.... 197
Telephone Gear, Machine-Switching.* By F. R. McBerty.....255–260
Telephone Girl, The..... 206
Telephone Field, Accident Prevention in the. By J. F. Naylor.....211–213
Telephone in France, American..... 206
Telephone in Hawaii, History of the.. 253–254
Telephone Installations in Yucutan... 143
Telephone Jobs for Iowans..... 307
Telephone Law Book, Second Edition of 87
Telephone Men, U. S. Needs..... 267
Telephone Operators on the British Front 47
Telephone Outfit, Patterson Gives..... 162
Telephone Patents Issued Recently.* By David S. Hulfish..... .....42–43, 153–154, 213–214, 279–280, 325–326, 37, 85, 143, 195, 239–240
Telephone Parts, Welding Metal..... 249
Telephone Percentages 276
Telephone Pole Sign Post, A..... 6
Telephone, Protecting the 270
Telephone Rates, Discrimination in. By J. W. Howett..... 215
Telephone Rates in Honduras..... 125
Telephone, Radio, Improvements in the.* By Frank C. Perkins.....157–158
Telephone Receiver, Audibility Current of a.* By E. W. Washburn..... 313
Telephone Repairers Are Busy..... 96
Telephone Tax, The 298
Telephone Transformer, The.* By H. S. Sheppard.....13–17
Telephone School, Big Four..... 131
Telpehone Scrap Book, The*.....127–130
Telephone Surgical Probe 29
Telephone Time Service in Switzerland 196
Telephone Trade, Scandinavia's.* By E. A. Brofos 203–204
Telephone Transmission.* By Chas. Allen Wright 237–242
Telephone Transmission.* By Bancroft Gherardi 13–15
Telephone Transmission Losses....273–279
Telephone Vibrations Direct Aircraft* 265–266
Telephone versus the Slacker, The*..19–20
Telephones and the Sky Line..... 267
Telephones at Gettysburg..... 265
Telephones for New York Subway..... 4
Telephones, Gas Masks Have..... 312
Telephones in Gas Masks..... 67
Telephones Made Trusts 133
Telephones, British Colonial Telegraphs and.* By R. W. Weightman 89–97
Telephones for Camp Kelly..... 81
Telephones in the Forest..... 125
Telephones on the Isle of Madagascar. 17
Telephones on War Basis..... 220
Telephones, Target Ranges Get..... 251
Telephonic Reception of Cable Messages 316
Telephonic Transmission Losses.* By K. Ogawa and T. Arakawa.....163–172
Telephoning from Moving Train..... 136
Telephonize All the Telegraph Lines (editorial) 290
Telephony in Argentina 12
Telephony in Argentina 36
Telling the Public How.....159–161
Ten Miles of German Trench, Blowing Up* 209–210
Tennessee, Merger in 152
Tennessee Merger, Virginia- 122
Tennessee, Physical Connection Bill in. 220
Tension in Suspension Strand.* By L. C. Eddy, Jr..... 132
Terminal Pole Line Inspection Report* 12
Terminals, Outdoor Cable..... 289
Tester, Convenient Battery Call..... 96
Test Set, A Well Designed*..... 223
Test, Use is the*..... 165
Testing of Its Cords by the Kellogg Company* 49
Texarkana Employees Loyal..... 292
Texas, Brownwood District of, Meets.. 196
Texas City Asks Interconnection..... 86
Texas Commission Bill, Change in.... 132
Texas Company to Expand..... 160
Texas Independents Ready..... 70
Texas Independents Voice Patriotism.. 276
Texas Merger Off, One..... 9
Texas, Merger Probable, Beaumont... 247
Texas Telephone Company Equips Camp 188
Theoretical Depreciation.* By James E. Allison 230–238
Thickness, Receiver Diaphragm*...257–258
Time Service, Telephone, in Switzerland 196
To Discourage Unofficial Directories... 244
Toledo Gets New Exchange..... 158
Toledo Labor Case, The.....319–324
Toledo's Strike 5
To Locate Moisture in Cable..... 12
Toll Board for Warsaw, Indiana*..... 161
Toll Calls, Wasting Time on..... 272
Toll Junction, Ask Guards for Big... 278
Toll Rates Unchanged, Minnesota.... 276
To Re-Enact Ordinance in Detroit..... 186
To Resist South Bend Merger..... 213
Tornado Effects in Kansas 22
To the U. S. I. T. A. (editorial)..... 254
Trade Commission's Investigation..... 136
Trade, Of Interest to the* 49–53, 105–109, 161–165, 223–226, 284–285, 329–335, 44–47 93–97, 145–147, 197–200, 246–251, 289–296
Trade Paper Reading, A Bill to Diminish (editorial) 3
Trade Press Helps, The..... 249
Trade, Scandinavia's Telephone.* By E. A. Brofos 203–204
Traffic Association, The Eastern.* By H. E. Bradley 83–87
Traffic Committee Meets, Independent. 25
Train, Telephoning from Moving..... 136
Training of Men, Building Up Forces and. By E. L. Smith.....263–265
Transformer, The Telephone.* By H. S. Sheppard.....13–17
Transcontinental Line, Will Use..... 280
Transmission Hints, Directory Gives.. 284
Transmission Losses, Telephonic.* By K. Ogawa and T. Arakawa.....163–172
Transmission, Telephone.* By Chas. Allen Wright 237–242
Transmission, Telephone.* By Bancroft Gherardi 13–15
Transmission, Value of Articulation in.* By Ray H. Manson.....155–156
Transmitter Repairs, Instant..... 246
Transmitter Stands Fire Test, Kellogg* 290
Trees, Companies May Trim..... 132
Trench, Blowing Up Ten Miles of German* 209–210
Trolley, Mistakes Cable for..... 142
Trouble in Chicago, More..... 81
Trouble, Shooting, in Front of the Guns (editorial) 1
Trouble Shooteress, The..... 120
Trucks, Advantages of Motor..... 81
Trusts, Telephones Made 133
Tuning-Fork Recorder of Wave Forms* 130
Twist Out of Flexible Cords, Taking the 36
Two-Day Convention in Indianapolis.. 154

U

Uninsulated Wire, Duty to Discover... 188
Union Affiliations, Operators Deny.... 172
Unofficial Directories, To Discourage.. 244
"United States, The" 26
Universal Service, Sunny on..... 247
U. S. Field Artillery, 149th, Kellogg Equipped* 247
U. S. Needs Telephone Men..... 267
U. S. Wire Lines Organize to Help... 186
U. S. I. T. A., To the (editorial)..... 254
154–156, 214–219, 281–283, 326–328, 39–43, 87–92, 137–141, 189–193, 241–245
Urges Changes in Minnesota Laws.... 204
Use of Poles, Joint. By L. C. Eddy.. 88
Use is the Test*..... 165
Users Can Help, How..... 266
Uses for Stromberg Mine Telephones.. 44
Utility Commission News, Public..... ..... 43–47, 101–104,
Utility Control, State versus Municipal (editorial) 289–290
Utilities, Public, Evolution in..... 178
Utilities and the Law, Public. By E. W. Cunningham 23–24

V

Value of Articulation in Transmission.* By Ray H. Manson.....155–156
Value New Mexican Telephones..... 30
Vehicle Question, The Motor (editorial) 52
Venice, Cal., Merger Proposition in.... 206
Vibrations, Telephone, Direct Aircraft* 265
Virginia-Tennessee Merger 122
Visit Exchanges, Public Cannot..... 120
Voltmeters, Resistance Chart for*.... 129
Volunteer, St. Louis Employes All.... 254
Volunteers, New York's Signal..... 298

W

Waco, Texas, Additional Equipment for 164
Wants Interconnection, Grand Forks.. 142
Wants Physical Connection, Columbus. 125
Wants to Fine for Rubbering..... 66
War Tax Reminder 206
War Service Dependents 97
War Tax Bill, The..... 141
War Activities of the Bell System....82–84
War, Wireless Telephony in the..... 36
War Instructions, Western Union..... 334
War Time, Western Electric in..... 331
War Tax, The 333
War, the Industry's Contribution to (editorial) 289
War, Effect of, on England's Wires.277–278
War May Stop Massachusetts Inquiry. 236
War, Mobilize Operators for..... 261
War Department, Equipment Used by the (editorial) 232–233
War Basis, Telephones on..... 220
War, Wires and the, The..... 196
Warsaw, Indiana, Toll Board for*.... 161
Warsaw, Chief Operator's Desk for*.. 161
Warsaw, Improvements at..... 99
Washington, Night Servcie Difficulties in 200
Washington, More Operators for..... 266
Wasting Time on Toll Calls..... 272
Wave Forms, Tuning Fork Recorder of* 130
Way to Raise Rates, The (editorial)... 58
Ways to Save Gasoline, Eight..... 222
Welding Metal Telephone Parts*..... 249
Welfare, Moral, Talks for Operators...141
Well Designed Test Set, A*..... 223
Western Electric's Arrangements..... 285
Western Electric in War Time..... 331
Western Union War Instructions..... 334
Wheeling Threatens Confiscation..... 194
When to Keep Off the Line..... 6
Where We Are Drifting. By Terry W. Allen 17–18
Why Negotiate? By Terry W. Allen.. 99
..... 203–204
Why Is a "Business Rate?"..... 54
Wisconsin Meeting at Marshfield..... 245
Wisconsin Operators Meet 134
Wisconsin Rurals to Center in Exchange 267
Will Power and Success..... 208
Will Use Transcontinental Line..... 280
Wires, Effect of War on England's.277–278
Wire Earnings Grow 236
Wire Lines Organize to Help U. S..... 186
Wire Under Fire, Working a..... 147
Wire, Duty to Discover Uninsulated... 188
Wire, Germany Sends Photos by..... 208
Wire, Magnet, Supply of, Small..... 186
Wires and the War, The..... 196
Wires, Raise, for Ranchers' Convenience 188
Wireless Telephony in the War..... 36
Wireless Telephone, De Forest..... 108
Wireless Generator, Motorcycle..... 172
Wires Out of Milwaukee, More..... 213
Women Don't Gossip, Indiana..... 16
Working a Wire Under Fire..... 147
Work, The Operator and Her.* By J. H. Corcoran 67–69
"Would I Have Invested?" (editorial)
Would Regulate Pay Telephones..... 120

Y

Yucatan, Telephone Installation in.... 143

Z

Zone System Protected, Joplin..... 190
Zone System, Joplin, is Compromised.. 267